## **PUBLIC NOTICE**

**PERMIT APPLICATION:** NRS # 06.137

APPLICANT: TWOG, LLC

Attn: Robert Martin

1410 Kensington Square Court, Suite 101

Murfreesboro, Tenn. 37130

615-893-2635

**LOCATION:** Unnamed tributaries to Bushman Creek mile 3.2, Proposed Harris-Teeter Store and

outparcels at the south east corner of North Rutherford Boulevard and Highway 96,

Murfreesboro, Rutherford Co. 35.8708 °N, -86.3558 °W

WATERSHED DESCRIPTION: This project is located in the Stones River watershed (HUC TN05130203) in a 203-acre drainage basin. The affected stream is an unassessed, first-order intermittent tributary to Bushman Creek. Bushman Creek is assessed as fully supporting its classified surface water uses. The classified uses for the tributaries to Bushman Creek are fish and aquatic life, recreation, livestock watering and wildlife, and irrigation. The tributary currently extends 575 linear feet across the property. The stream is channelized, previously relocated and lacks woody riparian zone. The substrate is largely vegetation and silt. The surrounding land use is residential and increasing commercial. (Photo of the stream is included on the Internet version of this notice at <a href="http://www.state.tn.us/environment/wpc/wpcppo/arap">http://www.state.tn.us/environment/wpc/wpcppo/arap</a>)

**PROJECT DESCRIPTION:** The applicant proposes to relocate the unnamed stream, a total of 550 linear feet, toward the edge of the property for the purpose of development. The proposed development is a retail store, outparcels and associated parking. The relocated channel will be a total of 640 linear feet with a total of 82 linear feet culverted for two road crossings (sinuosity of 1.2, designed to carry a mean annual flow of 0.16 cubic feet per second). Considering the sinuosity of the relocated channel, there will be effectively 670 linear feet of open channel. The relocated channel will have a larger channel for the safe passing of flood flows and a smaller base flow channel.

The new channel riparian zone will be planted with green ash (*Fraxinus pennsylvanica*), black willow (*Salix nigra*) and willow oak (*Quercus phellos*) on 30-foot centers, the random placement of alder (*Alnus serrulata*), sweetshrub (*Calycanthus floridus*), and oak leaf hydrangea (*Hydrangea quercifolia*), and the side slopes will be planted with a mixture of switch grass (*Panicum nirgatum*) and big blue stem (*Andropogon geradii*).

The applicant provided geotechnical information revealing the site is dominated by Ridley Limestone and associated clays. The relocated stream's hydrology and vegetation will be monitored for five years with annual reports submitted to the division. A 75% survival rate of the riparian buffer is proposed for the riparian woody plants.

In accordance with the Tennessee Antidegradation Statement (Rule 1200-4-3-.06), the division has determined that the proposed activity will not result in degradation to water quality.

PERMIT COORDINATOR: Juliana W. Kyzar

USGS TOPOGRAPHIC QUADRANGLE: Dillton Quad 315 SE



Photo 1: Unnamed tributary at downstream end of property (at Rutherford Blvd.)

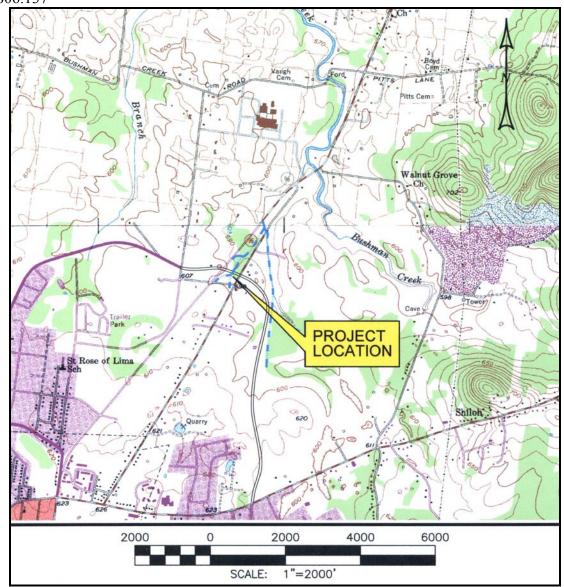
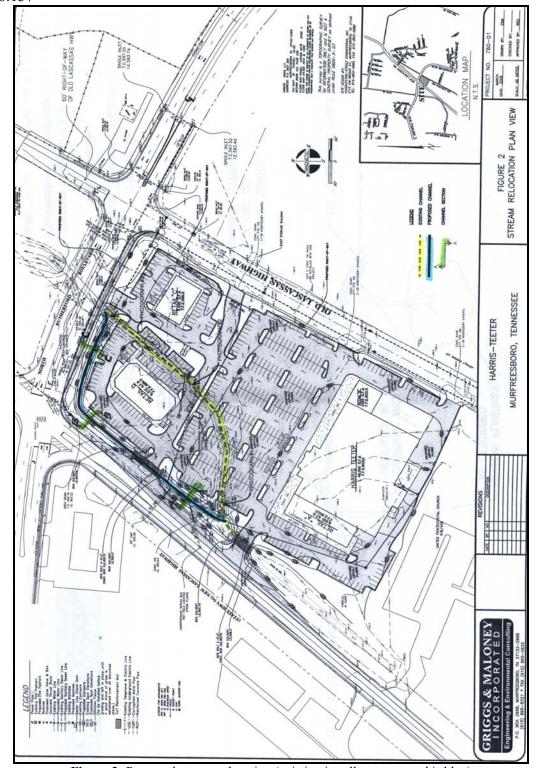


Figure 1: USGS topographic map with project area indicated



**Figure 2:** Proposed stream relocation (existing is yellow, proposed is blue)

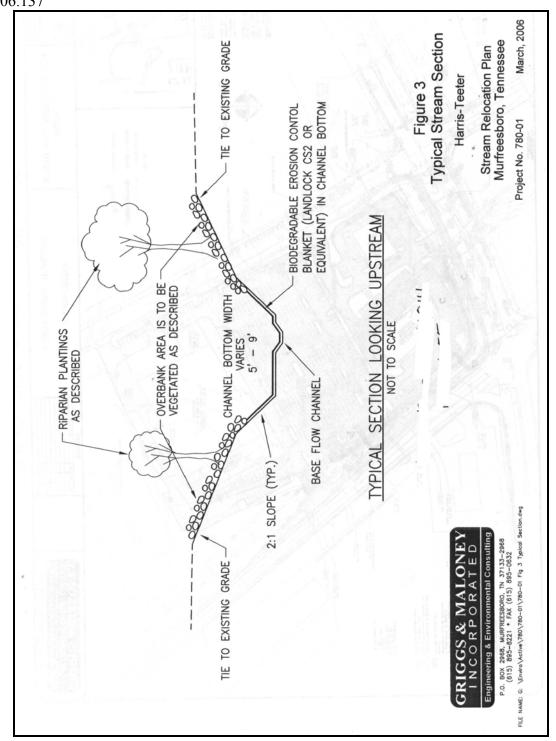
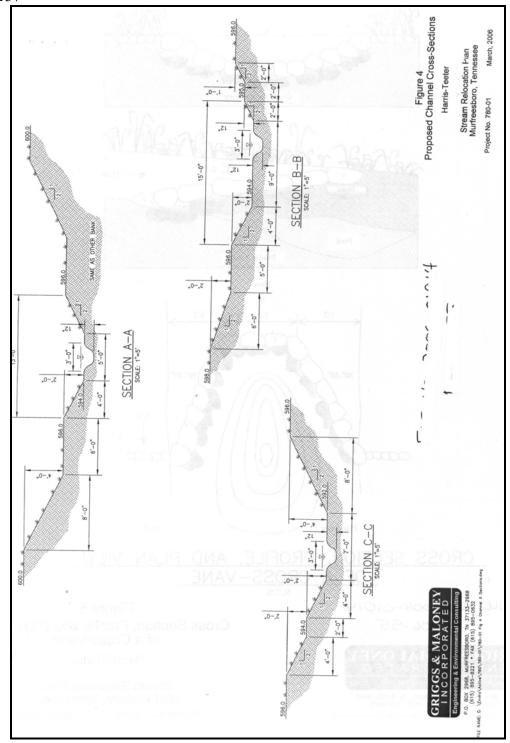


Figure 3: Typical proposed cross section



**Figure 4:** Proposed channel cross sections (see figure 2 for locations)

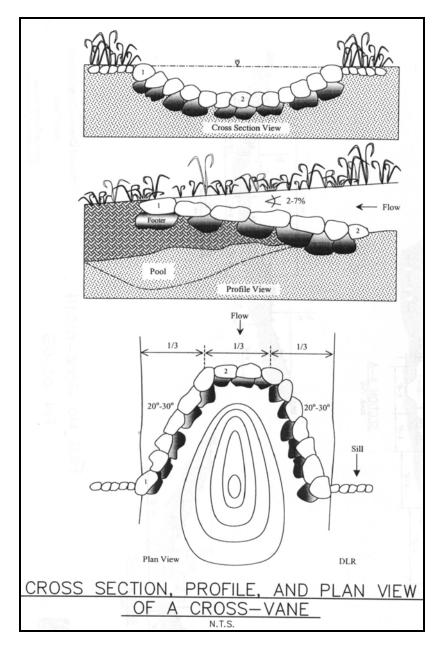


Figure 5: Proposed instream structures